

CLAIMS:

1. A fiber optic device for polishing fiber optic fiber ends and ferrules comprising:

(a) a base;

(b) a drive shaft having a polishing mounting wheel with a face to which a polishing medium may be secured;;

(c) a holder for maintaining a ferrule in a position to be polished adjacent the polishing medium; and

(d) indexing means driven by said drive shaft for moving said holder transversely across the polishing wheel at a predetermined rate.

2. The fiber optic device of Claim 1 further including transmission means for changing the gear ratio so that different indexing rates may be established for different polishing requirements.

3. The fiber optic device of Claim 1 wherein said indexing means is driven from said drive shaft at a rate approximately equal to the diameter of the cable fiber per revolution of the drive shaft.

4. The fiber optic device of Claim 1 including an arbor plate for polishing film detachably securable to said wheel.

5. The fiber optic device of Claim 3 wherein said arbor plate is planar.

6. The fiber optic device of Claim 4 wherein said arbor plate is generally annular defining a central recess thereby producing an acoustic chamber.

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7. The fiber optic device of Claim 1 further including electronic means for audibly monitoring the polishing of ferrules.

8. The fiber optic device of Claim 1 wherein said drive shaft is driven by manually operable means.

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9. The fiber optic device of Claim 1 wherein said drive shaft mounting wheel is driven by a reversible motor.

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10. A method of polishing a fiber optic ferrule connected to an optical fiber cable comprising:

- (a) providing a polishing film having a surface;
- (b) providing a holder for the ferrule for maintaining said ferrule in a position against said surface;
- (c) rotating said film surface; and

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- (d) indexing said holder to move at a predetermined rate approximately equal to the outer diameter of the cable fiber each revolution of the film surface.

11. The method of Claim 10 wherein said film surface is on a polishing wheel driven by a
5 drive shaft.

12. The method of Claim 11 wherein said holder is moved by a transmission from said drive shaft.